



At a Glance

Moving to Higher Performance

May 2011

Introduction

Since 2001, South Carolina has assigned academic performance ratings to its schools and school districts. One of the legislatively defined purposes of the accountability system is to “(1) use academic achievement standards to push schools and students toward higher performance by aligning the state assessment to those standards and linking policies and criteria for performance standards, accreditation, reporting, school rewards, and targeted assistance,” {Section 59-18-110.}. Have the academic achievement standards accomplished that purpose? Are schools and students performing at higher levels?

Comparisons of the most recent performance with 1998 performance demonstrate the progress on national measures shown in the box below:.

SC's Performance

- SC improved the percentage of 4th graders scoring Basic and Above on NAEP reading from 53 percent in 1998 to 62 percent in 2009; in math the percentage rose from 59 percent in 1998 to 78 percent in 2009;
- SC improved the percentage of 8th graders scoring Basic and Above on NAEP math from 53 percent in 1998 to 69 percent in 2009; reading scores increased only from 66 percent to 68 percent;
- SC improved the percentage of 4th graders scoring Basic and Above on NAEP science from 54 percent in 2000 to 72 percent in 2009; at the 8th grade level the percentage improved from 48 percent in 2000 to 55 percent in 2009;
- The percentage of students participating in the Advanced Placement program increased from 17.7 percent in 2000 to 26 percent in 2009; passage rates rose from ten percent in 2000 to 14.8 percent in 2009;
- SC's standing among the states on college admissions tests remains low, but improving. The state ranks 48th on SAT comparisons and 43rd on ACT comparisons.

When we look closer, we see that a number of school districts have improved their performance on state tests and with on-time graduation rates. While the tests may differ (e.g., PACT, PASS, HSAP, end-of-course) the essential question remains the same, “are SC students achieving the expectations the state has established for them?” Five districts made progress in both English language arts and mathematics at grades 3 and grade 8. The districts are Abbeville County School District, Calhoun County School District, Dorchester School District Four and Saluda County Schools. This progress was made despite increases in the percentage of students living in poverty (2010 poverty indices ranged from 66 to 90 percent) and substantial reductions in state funding. Thirty-two (32) districts accomplished gains in the two content areas at grade 3 only; seven districts accomplished gains in the two content areas at grade 8 only.

District Ratings

Ratings for school districts are based upon multiple criteria: grade 3-8 PASS scores, HSAP first attempt scores, on-time graduation rate and end-of-course test scores (NOTE: a fifth-year graduation rate is to be added in calculations of the 2011 ratings.) These criteria span grade levels, content areas and cumulative expectations. To understand progress over the breadth of a school system, the EOC sorted districts by ratings categories and explored selected profile information about those school districts to identify patterns and ways in which the top performers may differ from their peers. In Table 1, the values for profile elements with historic strong associations with positive performance are displayed.

of dollars spent on teacher salaries and the percentage of students eligible for the gifted and talented program. There is a significant negative relationship between the absolute index in these districts and poverty, teacher vacancies more than nine weeks and the dollars spent per pupil. Despite the persistent association of poverty with lower performance, there is considerable evidence that focused leadership, excellence in teaching and direct intervention with the academic barriers most commonly associated with poverty, district performance can rise.

Common Assumption

The common assumption is that higher performing school districts enroll fewer young people from poverty and have access to community and family resources (other than financial) that the lower performing districts do not. The range within profile data and the inconsistent relationship among the absolute indices and profile factors do not affirm this assumption. Instead, we see opportunity within each group of districts and across all districts to leverage resources for higher achievement.

Three districts provide opportunity for greater study. These top-ranked districts serve student populations of which greater than 70 percent of students are living in poverty. Darlington County School District attained the 12th highest absolute index in the state. The district has a poverty index of 81.38, is rural/small town in nature and spends only 96 percent (\$9,366) of the state mean per pupil (\$9,723). Darlington County Schools enroll nearly 11,000 students. Abbeville County School District attained the 17th highest absolute index in the state. That district has a poverty level of 77.07, is

rural/small town in nature and spends just at the state mean for district per pupil expenditures. Abbeville County Schools enroll just over 3,200 students. Horry County School District enrolls nearly 38,000 students and is spread over an urban-suburban-rural landscape. The district spends just over \$10,000 per student and exhibits a poverty level of 72.34 percent. Each of these districts benefit from stability in the principalship as well. The percentage of principals in their role for three or more years is 100 percent in Abbeville County School District, 73 percent in Darlington County School District and 77 percent in Horry County School District.

In contrast, fourteen (14) of the 48 districts rated Average and only one of the districts rated Below Average or At Risk have poverty levels of 70 percent or below. Twelve of the 20 districts rated Below Average or At Risk exhibit poverty levels of 90 percent or greater. Six of the districts rated Average have poverty levels of 90 percent or greater; therefore, a poverty index above 90 percent is not deterministic of higher academic performance. These school districts are Orangeburg Three, Calhoun, McCormick, Clarendon 1, Barnwell 19, and Williamsburg.

While the association between poverty and performance remain daunting, there are sufficient counter examples of districts with high poverty scoring Average, Good or Excellent to prompt each of us to re-examine our assumptions and to promote policies, practices and funding that accomplish the state's aspirations for its students and its schools.

ADDITIONAL INFORMATION

If you have questions, please contact the Education Oversight Committee (EOC) staff for additional information. The phone number is 803-734-6148. Also, please visit the EOC website at www.eoc.sc.gov for additional resources.

Table 1 Descriptive Statistics for Selected Profile Information <small>Source: 2010 Annual District Report Cards</small>			
Information	All Districts (n=86)		
	Minimum	Maximum	Mean
Poverty Index	25.60	98.32	76.10
Absolute Index	1.68	3.90	2.87
Growth Index	-.59	.70	.11
# students	701	70,969	8,375
Number of schools	2	92	13
Number of charter schools	0	7	0
Supt. years in district	0	20	4.8
% Teachers Advanced Degrees	36.8	72.9	58.8
% Teacher Returning	73.7	94.7	88.4
# Teacher Vacancies more than 9 weeks	0	4.6	.57
\$ Spent/Pupil	\$7,185	\$14,243	\$9,723
% Spent on Teacher Salaries	42.5	59.8	52.85
% Spent on Instruction	45.3	61.6	55.8
% Graduates Eligible for LIFE scholarships	16.9	64	35.96
% Students in Gifted & Talented	0	33.9	13.59
% Students on IEP (non speech)	6.3	15.6	10.45

Since 2001 the profile factors associated with higher performance have remained constant when the performance factors for all districts have been studied. Higher absolute indices are associated positively, at a statistically significant level, with the following:

- Number of students
- Percentage of teachers with advanced degrees
- Percentage of teachers returning (a mean of three years)
- Percentage of expenditures spent on teacher salaries
- Percentage of expenditures spent on instruction
- Percentage of graduates eligible for LIFE scholarships
- Percentage of students identified as gifted and talented
- Number of schools

Higher absolute indices are associated negatively, at a statistically significant level, with the following:

- Poverty Index
- Teacher vacancies more than nine weeks
- Dollars spent per pupil

These associations suggest that there is a level of organizational size and a degree of organizational stability as well as a level of student poverty that create circumstances or context for higher achievement. A closer examination of school districts within rating categories indicate far greater range within district groupings than often assumed and substantiate clearly that the level of student poverty is not deterministic of district performance.

The questions are the following: Do these associations hold significance when we examine the Districts Rated Excellent or Good, based the level of the absolute indices? Are there differences among the Districts Rated Excellent or Good, Districts rated Average and the Districts Rated Below Average or At Risk that suggest changes in practice? The three district groups appear similar when we examine student enrollment, teachers with advanced degrees and superintendent’s years in the district. The Districts Rated Below Average or At Risk expend considerably more dollars; however, several revenue streams to those districts including Title One, IDEA, EIA academic assistance, EAA technical assistance, etc. are linked to the level of student poverty and/or underperformance. Those revenue streams are not available to the higher performing districts. The Districts Rated Below Average or At Risk exhibit a much smaller range in poverty indices (i.e., 78.57 to 98.32) than do the Districts Rated Excellent or Good which range from 25.6 to 81.38 percent.

The pattern differs when school districts are divided into three groups: Those rated Excellent or Good; those rated Average and those rated Below Average or At Risk.

Table 2 Selected Profile Information Across Three District Ratings Groupings <small>Source: 2010 Annual District Report Cards</small>									
Information	Districts Rated Excellent or Good (n=18)			Districts Rated Average (n=48)			Districts Rated Below Average or At Risk (n=20)		
	Minimum	Maximum	Mean	Minimum	Maximum	Mean	Minimum	Maximum	Mean
Poverty Index	25.60	81.38	59.07	58.32	96.68	76.89	67	98.32	89.53
Absolute Index	3.18	3.90	3.37	2.65	3.17	2.89	1.68	2.64	2.35
Growth Index	.14	.58	.28	-.24	.7	-.13	-59	.3	-0.73
# students	1,641	37,765	11,910	840	70,969	8,780	701	24,460	4,218
Number of schools	4	49	15.83	2	92	74.48	3	50	8.55
Number of charter schools	0	1	.11	0	7	.5	0	3	.21
Supt. years in district	.5	16	5.83	.5	20	4.9	0	19	3.6
% Teachers Advanced Degrees	53.2	70.5	60.67	36.8	71.2	58.61	44.1	72.9	57.53
% Teacher Returning	87.7	94.2	91.34	75.2	94.7	88.90	73.7	92.8	84.37
# Teacher Vacancies more than 9 weeks	0	.5	.09	0	3.2	.52	0	4.6	1.14
\$ Spent/Pupil	\$7,185	\$10,443	\$8,853	\$7,856	\$12,648	\$9,562	\$8,525	\$14,243	\$10,953
% Spent on Teacher Salaries	51.2	59.7	56.13	42.5	59.8	53.06	44.2	56	49.18
% Spent on Instruction	54.8	61.5	58.78	45.3	61.6	55.9	46.2	58.6	52.72
% Graduates Eligible for LIFE scholarships	25.9	64	41.96	23.3	62.9	35.14	16.9	52.1	29.83
% Students in Gifted & Talented	10.5	33.9	20.6	2.4	23.3	13.72	0	17.1	6.72
% Students on IEP (non speech)	6.6	12.8	9.12	7	15.6	11.02	6.3	14.3	10.3

When we examine Table 2 the similarities among the three groups stand out more than the differences. Underperforming districts are not uniformly low enrollment districts. They look much like their higher performing peers with respect to the number of schools, number of charter schools, the superintendent’s years in the district and the percentage of teachers with advanced degrees. There are considerable differences in the percentage of teachers returning from the previous year (a three-year mean) and the number of teacher vacancies for longer than nine weeks. Each of these suggests a protracted hiring period, potentially one that precludes opportunities for development of institutional knowledge among teachers and orientation to the community.

The student populations among the three groups differ considerably on measures of poverty, eligibility for the state gifted and talented program and percentage of graduates eligible for LIFE scholarships.

The lowest performing districts spend significantly

smaller proportion so funding on teacher salaries and instruction; however, the districts have more funds to spend generally and a teaching force that is less well-educated (as defined by the percentage of teachers with advanced degrees). Teachers with advanced degrees earn higher salaries in accordance with state and local teacher salary schedules.

Using association with the district absolute index as the measure, we examined the relationship among profile factors and the index to determine those factors which hold a statistically significant relationship. Absolute indices in the highest performing districts are associated positively with growth ratings and the percentage of students eligible for the gifted and talented program. There is a negative relationship with poverty and the percentage of students identified under IDEA. Indices of districts rated Average are associated positively with the percentage of teachers holding advanced degrees and the percentage spent on teacher salaries. There is a negative association with poverty and the dollars spent per pupil. Finally, among Districts Rated Below Average or At Risk the positive relationships with the absolute index include teachers returning from the previous year, the percentage